

Claims

1. A method of forming building materials mostly comprising magnesium oxide, comprising the steps of :

- a) mixing magnesium oxide powder with at least one of vegetable powder, vegetable fiber, mineral powder, and mineral fiber in a predetermined mixing ratio to produce an admixture;
- b) adding water to the admixture to produce a wet powdered admixture;
- c) inserting the wet powdered admixture into a preheated mold, and heating and simultaneously compressing the wet powdered admixture at 80° to 120° C under a pressure of 10 to 250 kg/cm² to rapidly harden the admixture; and
- d) releasing a resulting product from the mold.

2. A method of forming building materials mostly comprising magnesium oxide, comprising the steps of :

- a) mixing magnesium oxide powder with at least one of vegetable powder, vegetable fiber, mineral powder, and mineral fiber in a predetermined mixing ratio to produce an admixture;
- b) adding water to the admixture to produce a wet powdered admixture;
- c) inserting the wet powdered admixture into a frame mold assembly of a molding machine including a frame mold and a preheated lower mold, and heating and simultaneously compressing the wet powdered admixture at 80° to 120° C under a pressure of 10 to 250 kg/cm² after a lower side of an upper mold is inserted into the frame mold to rapidly harden the admixture; and
- d) releasing a resulting product from the molding machine.

3. A method of forming building materials mostly comprising magnesium oxide, comprising the steps of :

a) mixing magnesium oxide powder with at least one of vegetable powder, vegetable fiber, mineral powder, and mineral fiber in a predetermined mixing ratio to produce
5 an admixture;

b) adding water to the admixture in such an amount that the admixture is useful to be used in an injection molding to produce a wet admixture;

c) inserting the wet admixture from a high pressure nozzle through an inlet of a mold assembly into the mold assembly;

10 d) hardening the wet admixture by a heater positioned in each mold during insertion of the admixture into the mold assembly or after the admixture is inserted into the mold assembly; and

e) releasing a resulting product from the mold assembly.

4. A method of forming building materials mostly comprising magnesium oxide, comprising the steps of :

a) mixing magnesium oxide powder with at least one of vegetable powder, vegetable fiber, mineral powder, and mineral fiber in a predetermined mixing ratio to produce an
15 admixture;

b) adding water to the admixture in such an amount that the admixture is useful to be used in an extrusion molding to produce a wet admixture;

c) extruding the wet admixture into a desired shape of a product by use of an extruder;
20 and

d) passing a resulting product through a heating device positioned before an outlet of

the extruder to harden the resulting product.

5. A building material mostly comprising magnesium oxide obtained by a method comprising the steps of:

- a) mixing magnesium oxide powder with at least one of vegetable powder, vegetable fiber, mineral powder, and mineral fiber in a predetermined mixing ratio to produce an admixture;
- b) adding water to the admixture to produce a wet powdered admixture;
- c) inserting the wet powdered admixture into a preheated mold, and heating and simultaneously compressing the wet powdered admixture to rapidly harden the admixture; and
- d) releasing a resulting product from the mold.